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CORRES. CONTROL
INCOMING LTR. NO.

4475 RF 93

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DATE

ACTION

DIST. LTR ENC

BENEDETTI, R.L.		
BENJAMIN, A.		
BERMAN, H.S.		
CARNIVAL, G.J.		
COPP, R.D.		
CORDOVA, R.C.		
DAVIS, J.G.		
FERRERA, D.W.		
FRANZ, W.A.		
HANNI, B.J.		
HEALY, T.J.		
HEDAH, T.G.		
HILBIG, J.G.		
KIRBY, W.A.		
KUESTER, A.W.		
MANN, H.P.		
MARX, G.E.		
MCKENNA, F.G.		
MORGAN, R.V.		
PIZZUTO, V.M.		
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RILEY, J.H.		
SANDLIN, N.B.		
SATTERWHITE, D.G.		
SCHUBERT, A.L.		
SETLOCK, G.H.		
SULLIVAN, M.T.		
SWANSON, E.R.		
WILKINSON, R.B.		
WILSON, J.M.		

Hutchins N X X

Busby W X X

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PATS/T130G

Adm Rec X

Reviewed for Addressee
Corres. Control RFP10-8-93 Ci
DATE BY

Ref Ltr. #

DOE ORDER # 5400.1



Department of Energy

ROCKY FLATS OFFICE
P.O. BOX 928
GOLDEN, COLORADO 80402-0928

OCT 07 1993

93-DOE-11269

Mr. Martin Hestmark
U.S. Environmental Protection Agency, Region VIII
ATTN: Rocky Flats Project Manager, 8HWM-RI
999 18th Street, Suite 500, 8WM-C
Denver, Colorado 80202-2405

Mr. Gary Baughman
Hazardous Waste Facilities Unit Leader
Colorado Department of Health
4300 Cherry Creek Drive South
Denver, Colorado 80222-1530

Gentlemen:


The U.S. Department of Energy Rocky Flats Office (DOE/RFO) is formally requesting a schedule extension for the Interagency Agreement (IAG) Table 6 Milestones for Operable Unit No. 5 (OU5). The IAG requires that the Draft OU5 Resource Conservation and Recovery Act Facility Investigation/Remedial Investigation (RFI/RI) Report be delivered to the Environmental Protection Agency by November 30, 1993. The Final RFI/RI Report is due May 3, 1994. This correspondence forwards justification for schedule delays and supporting enclosures for requesting milestone extensions for the submittal of the OU5 Draft and Final RFI/RI Reports.

Due to the structure of the OU5 Workplan, which utilizes the "Observational Approach" to field sampling, it is not possible to meet either of these milestones. DOE believes the approach is technically sound and very efficient in designing a field sampling plan to target potential source areas. The extensive use of Technical Memoranda (TMs) in the OU5 Workplan allowed for continuous reassessment of the site conditions as data were obtained.

The generation and implementation of the TMs, scope in excess of IAG requirements, procurement delays and a lack of scheduled review time for Human Health Risk Assessment TMs have resulted in schedule delays totaling 365 work days (approximately 17 months). However, DOE has made a determined effort to regain as much schedule as possible. Enclosure 1 shows the original schedule presented in the OU5 RFI/RI Workplan. Enclosure 2 shows a roll-up of the actual project schedule. A more detailed schedule is presented in Enclosure 3. The actual project schedule estimates completion of the Draft and Final RFI/RI Reports on December 20, 1994 and May 30, 1995, respectively. DOE is requesting an extension of 13 months based on the project schedule, although we believe good cause is justified for the delays presented in Enclosure 4.

The structure of the workplan was such that the wells monitoring Individual Hazardous Substance Sites (IHSSs) 115 and 133 (the old landfill and the ash pits) were installed as a final effort based on data gathered throughout the field investigation. As a result, only two quarters of data will be available for incorporation into the Draft RFI/RI Report. It is anticipated that all four quarters of groundwater data will be available for the final report. In addition, the draft report will utilize unvalidated data to avoid delays associated with laboratory turnaround time.

Sincerely,



A. H. Pauole
Acting Manager

Enclosure

cc w/Enclosure:

A. Rampertaap, EM-453
J. Ciocco, EM-453
B. Lavelle, EPA
J. Schieffelin, CDH
N. Hutchins, EG&G
W. Busby, EG&G
E. Mast, EG&G

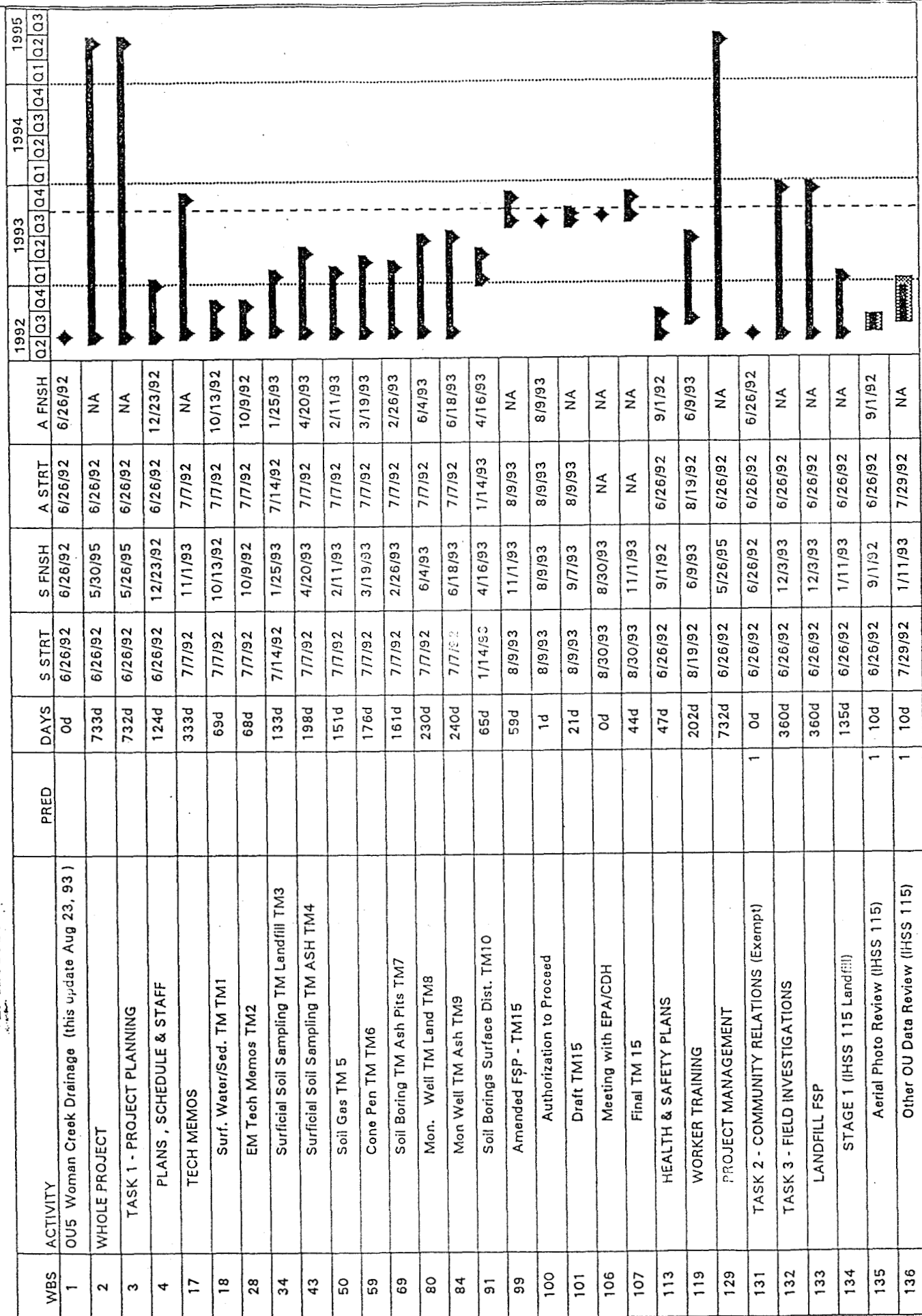
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Enclosure 1: OU5 Work Plan Project Schedule																							
Name	Sched. Start	Sched. Fin.	90				1991				1992				1993				1994				1
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
OU5 RFI/RI WORK PLAN SCHEDULE	2/4/90	5/3/94																					
Work Plan Development	9/4/90	8/30/91																					
Draft Work Plan	9/4/90	4/5/91																					
Final Work Plan	6/10/91	8/30/91																					
Procurement Cycle	9/1/91	10/1/91																					
Project Management	9/4/90	5/3/94																					
Task 1 - Project Planning	9/4/90	11/6/91																					
Task 2 - Community Relations	9/4/90	5/3/94																					
Task 3 - Field Investigation	10/2/91	3/30/93																					
Task 4 - Sample Analysis and Validation	11/14/91	6/1/93																					
Task 5 - Data Evaluation	6/4/93	9/29/93																					
Task 6 - Baseline Risk Assessment	6/25/93	5/3/94																					
Task 7 - Development & Screening of Alternatives	6/25/93	3/2/94																					
Task 8 - Treatability Studies	6/25/93	2/24/94																					
Task 9 - Phase I Remedial Investigation Report	6/4/93	5/3/94																					
Draft RFI/RI Report (IAG Milestone)	6/4/93	11/30/93																					
Final RFI/RI Report (IAG Milestone)	1/30/94	5/3/94																					

5- July 1950

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Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995					
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
137	HPGe Survey Review (IHSS 115)	1	31d	7/21/92	9/1/92	7/21/92	9/1/92																		
138	Hot Spot Land Survey (IHSS 115)	137,118	16d	8/27/92	9/18/92	8/27/92	9/18/92																		
139	STAGE 2 (IHSS 115 Landfill)		179d	10/13/92	6/29/93	10/13/92	6/29/93																		
140	Start Mag Survey (IHSS 115)	118,33	1d	10/13/92	10/13/92	10/13/92	10/13/92																		
141	Mag Survey (landfill, dist. area IHSS	118,140	15d	10/13/92	10/31/92	10/13/92	10/31/92																		
142	Review Mag Survey (IHSS 115)	141	16d	11/18/92	12/11/92	11/18/92	12/11/92																		
143	Start EM Survey (IHSS 115)	141,33	1d	10/13/92	10/13/92	10/13/92	10/13/92																		
144	EM Survey (landfill, dist. area IHSS 1	141,143	14d	10/13/92	10/31/92	10/13/92	10/31/92																		
145	Review EM Survey (IHSS 115)	144	16d	11/18/92	12/11/92	11/18/92	12/11/92																		
146	Start Soil Gas Survey (IHSS 115)	144FS + 3d	1d	2/8/93	2/8/93	2/8/93	2/8/93																		
147	Initial Soil Gas (landfill)	4FS + 3d, 146	44d	2/8/93	4/9/93	2/8/93	4/9/93																		
148	Review Initial Soil Gas Survey (IHSS	d, 147FF + 2d	25d	2/10/93	4/13/93	2/10/93	4/13/93																		
149	Soil Gas Survey - Anomalies (IHSS 11	148	11d	4/15/93	4/29/93	4/15/93	4/29/93																		
150	Review Soil Gas Survey - Anomalies (I	149SS + 5d	10d	4/21/93	5/4/93	4/21/93	5/4/93																		
151	FIDLER Survey of HPGe Hotspots (IHS		56d	4/12/93	6/29/93	4/12/93	6/29/93																		
152	STAGE 3 (IHSS 115 Landfill)		270d	11/4/92	12/3/93	11/4/92	NA																		
153	Sur Soil Samp (landfill)	9,151FF + 5d	0d	12/29/92	7/1/93	12/29/92	7/1/93																		
154	Sur Soil Samp (disturbed, IHSS 115)	153	7d	1/25/93	2/2/93	1/25/93	2/2/93																		
155	Start Soil Boring (soil gas, IHSS 115)	150	1d	5/12/93	5/12/93	5/12/93	5/12/93																		
156	Soil Borings (soil gas, IHSS 115)	155	5d	5/12/93	5/18/93	5/12/93	5/18/93																		
157	Review Soil Gas Boring (IHSS 115)	155FS + 3d	15d	5/18/93	6/8/93	5/18/93	6/8/93																		
158	Install Wellpoints (soil gas, IHSS 115)	167	8d	6/14/93	6/23/93	6/14/93	6/23/93																		
159	Monitor Wellpoints (soil gas, IHSS 11	158	150ed	7/5/93	12/3/93	7/5/93	NA																		
160	Soil Borings (character, IHSS 115)	145	18d	12/3/92	12/29/92	12/3/92	12/29/92																		
161	Sed Samples (SID&land) (exempt) - W	1,118	5d	11/4/92	11/10/92	11/4/92	11/10/92																		
162	Sur Water (SID&land)(exempt) - WCF	1,118	5d	11/4/92	11/10/92	11/4/92	11/10/92																		
163	STAGE 4 (IHSS 115 Landfill)		145d	4/20/93	11/15/93	4/20/93	NA																		
164	Start Cone and BAT (IHSS 115)		1d	4/20/93	4/20/93	4/20/93	4/20/93																		
165	Cone Pen (SID&land)	164	8d	4/20/93	4/29/93	4/20/93	4/29/93																		

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Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995				
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
166	Review Cone (IHSS 115)	165	17d	4/30/93	5/24/93	4/30/93	5/24/93																	
167	Well points (SID&land)	166	8d	6/8/93	6/17/93	6/8/93	6/17/93																	
168	Monitor Well Points (SID & Land)	167	150ed	6/18/93	11/15/93	6/18/93	NA																	
169	Start Mon Wells (IHSS 115)	83,212	1d	6/4/93	6/4/93	6/4/93	6/4/93																	
170	Mon Wells (drill&install, IHSS 115)	169	13d	6/4/93	6/22/93	6/4/93	6/22/93																	
171	Mon Wells (devel, IHSS 115) - WCFS	169SS + 5d	#####	6/11/93	6/25/93	6/11/93	6/25/93																	
172	Mon Wells (sample 1st qtr, IHSS 115)	171SS + 1d	13d	6/14/93	6/30/93	6/14/93	6/30/93																	
173	Mon Wells (sample 2nd qtr, IHSS 115)	172FS + 10d	6d	7/16/93	7/23/93	NA	NA																	
174	STAGE 5 (IHSS 115 Landfill)		182d	8/1/92	4/23/93	8/1/92	4/23/93																	
175	Plans Review (sewer)	1FS + 30d	5d	8/1/92	10/26/92	8/1/92	10/26/92																	
176	Sewer Snake SOP	175	76d	9/25/92	1/15/93	9/25/92	1/15/93																	
177	Preparation		7d	9/25/92	10/5/92	9/25/92	10/5/92																	
178	EG&G Review	177	37d	10/5/92	11/27/92	10/5/92	11/27/92																	
179	EG&G/SAIC Finalize SOP	178	33d	11/30/92	1/15/93	11/30/92	1/15/93																	
180	Sewer Snake	75,118,179	10d	4/12/93	4/23/93	4/12/93	4/23/93																	
181	Sewer Outfall Samp		2d	10/5/92	10/6/92	10/5/92	10/6/92																	
182	ASH PITS FSP		276d	6/26/92	8/2/93	6/26/92	NA																	
183	STAGE 1 (IHSS 133 Ash Pits)		59d	6/26/92	9/18/92	6/26/92	9/18/92																	
184	Aerial Photo Review (IHSS 133)	1	10d	6/26/92	9/1/92	6/26/92	9/1/92																	
185	Ash Pits Land Survey (HSS 133)	184	16d	8/27/92	9/18/92	8/27/92	9/18/92																	
186	STAGE 2 (IHSS 133 Ash Pits)		202d	9/14/92	7/5/93	9/14/92	NA																	
187	Start HPGe Survey (IHS 133) - EG&G	185,118	1d	9/14/92	9/14/92	9/14/92	9/14/92																	
188	HPGe Survey (IHSS 133) - EG&G		156d	9/14/92	4/28/93	9/14/92	4/28/93																	
189	Large Scale Survey (IHSS 133) -	185,118	80d	9/14/92	1/8/93	9/14/92	1/8/93																	
190	Detailed Survey (IHSS 133) - EG	189	47d	2/23/93	4/28/93	2/23/93	4/28/93																	
191	HPGe Survey Review (IHSS 133)		88d	1/11/93	5/14/93	1/11/93	5/14/93																	
192	Large Scale Survey Review (IHSS	189	22d	1/11/93	2/10/93	1/11/93	2/10/93																	
193	Detailed Survey Review (IHSS 13	190	10d	5/3/93	5/14/93	5/3/93	5/14/93																	
194	FIDLER Survey of Hotspots (IHSS 133	193FF + 10d	60d	2/22/93	5/14/93	2/22/93	5/14/93																	

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995					
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
195	Hot Spot Survey (IHSS 133)	193,118	5d	6/28/93	7/5/93	NA	NA																		
196	Start Mag Survey (IHSS 133)	195,118,33	1d	11/2/92	11/2/92	11/2/92	11/2/92																		
197	Mag Survey (IHSS 133)	95,118,196	31d	11/2/92	12/16/92	11/2/92	12/16/92																		
198	Review Mag Survey (IHSS 133)	197	29d	12/17/92	1/29/93	12/17/92	1/29/93																		
199	Start EM Survey (IHSS 133)	33	1d	11/2/92	11/2/92	11/2/92	11/2/92																		
200	EM Survey (IHSS 133)	199	31d	11/2/92	12/16/92	11/2/92	12/16/92																		
201	Review EM Survey (IHSS 133)	200	29d	12/17/92	1/29/93	12/17/92	1/29/93																		
202	STAGE 3 (IHSS 133 Ash Pits)		108d	3/1/93	7/30/93	3/1/93	7/30/93																		
203	Sur Soil Samp (IHSS 133)	49,201,118	34d	5/10/93	6/25/93	5/10/93	6/25/93																		
204	Start Soil Borings (IHSS 133)	79,118	0d	3/1/93	3/1/93	3/1/93	3/1/93																		
205	Soil Borings & GW Samples (IHSS 13	204	42d	3/1/93	4/27/93	3/1/93	4/27/93																		
206	Review Boring (IHSS 133)	205FS + 10d	39d	3/16/93	5/7/93	3/16/93	5/7/93																		
207	Investigate Magnetic Anomaly (IHSS		18d	7/7/93	7/30/93	7/7/93	7/30/93																		
208	FIDLER Survey - Magnetic Anoma		1d	7/7/93	7/7/93	7/7/93	7/7/93																		
209	Drill Boreholes - Magnetic Anomal		1d	7/30/93	7/30/93	7/30/93	7/30/93																		
210	STAGE 4 (IHSS 133 Ash Pits)		51d	5/20/93	8/2/93	5/20/93	NA																		
211	Start Mon Wells (IHSS 133)	89,118	1d	5/20/93	5/20/93	5/20/93	5/20/93																		
212	Mon Wells (Drill, IHSS 133)	211	21d	5/20/93	6/18/93	5/20/93	6/18/93																		
213	Mon Wells (develop, IHSS 133) - WCF	212FS + 2d	23d	5/25/93	6/25/93	5/25/93	6/25/93																		
214	Mon Wells (sample 1st qtr, IHSS 133)	213SS + 1d	22d	5/30/93	6/30/93	5/30/93	6/30/93																		
215	Mon Wells (sample 2nd qtr, IHSS 133	214FS + 15d	7d	7/23/93	8/2/93	NA	NA																		
216	PONDS FSP		319d	6/26/92	10/1/93	6/26/92	NA																		
217	STAGE 1 (C-Ponds)		64d	7/15/92	10/14/92	7/15/92	NA																		
218	Review Existing SW Data (IHSS 142)		64d	7/15/92	10/14/92	7/15/92	NA																		
219	Draft (IHSS 142)	1,21	23d	7/15/92	8/14/92	7/15/92	8/14/92																		
220	EG&G/DOE Review Draft (IHSS 1	219	3d	8/14/92	8/18/92	8/14/92	NA																		
221	Draft Final (IHSS 142)	220	5d	9/22/92	9/28/92	NA	NA																		
222	EG&G/DOE Review Draft Final (IH	221	3d	9/29/92	10/1/92	NA	NA																		
223	Final (IHSS 142)	222	3d	10/2/92	10/6/92	NA	NA																		

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S START	S FNSH	A START	A FNSH	1992				1993				1994				1995			
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
224	Submit Data to CDH&EPA (IHSS)	223	5d	10/7/92	10/14/92	NA	NA																
225	STAGE 2 (C-Ponds)		0d	6/26/92	6/26/92	6/26/92	6/26/92																
226	No Activities (IHSS 142)	1	0d	6/26/92	6/26/92	6/26/92	6/26/92																
227	STAGE 3 (C-Ponds)		5d	11/4/92	11/10/92	11/4/92	11/10/92																
228	Ponds C-1 & C-2 SW Samp (exempt)	27	5d	11/4/92	11/10/92	11/4/92	11/10/92																
229	Ponds C-1&C-2 Sed Samp (exempt)	27	5d	11/4/92	11/10/92	11/4/92	11/10/92																
230	Woman Cr Sed Samp (exempt)	27	5d	11/4/92	11/10/92	11/4/92	11/10/92																
231	STAGE 4 (C-Ponds)		231d	11/2/92	10/1/93	11/2/92	NA																
232	Start Mon Wells (IHSS 142)	118	1d	11/2/92	11/2/92	11/2/92	11/2/92																
233	Mon Wells 50092-50292 (drill&install,	232	6d	11/2/92	11/9/92	11/2/92	11/9/92																
234	Mon Wells 50092-50292 (develop, IH	232FS + 2d	10d	11/5/92	11/18/92	11/5/92	11/18/92																
235	Mon Wells 50092-50292(sample 1st	234FS + 1d	3d	11/9/92	11/11/92	11/9/92	11/11/92																
236	Mon. Wells 50092-50292 (samples 2	35FS + 90ed	3d	2/10/93	2/12/93	2/10/93	2/12/93																
237	Mon. Well 51193 (Drill & install, IHSS		3d	1/5/93	1/7/93	1/5/93	1/7/93																
238	Mon. Well 51193 (Devil, IHSS 142) -	237	10d	1/8/93	1/22/93	1/8/93	1/22/93																
239	Mon. Well 51193 (Sample 1st qtr., IH	238FS + 1d	1d	1/25/93	1/25/93	1/25/93	1/25/93																
240	Mon. Well 51193 (Sample 2nd qtr., I	39FS + 90ed	1d	4/26/93	4/26/93	4/26/93	4/26/93																
241	Install/Monitor Well Points		169d	2/3/93	10/1/93	2/3/93	NA																
242	Install Well Points		6d	2/3/93	2/10/93	2/3/93	2/10/93																
243	Monitor Well Points	242	165d	2/9/93	10/1/93	2/9/93	NA																
244	SURFACE DISTURBANCES (IHSS 209)		227d	6/26/92	5/21/93	6/26/92	5/21/93																
245	STAGE 1 (Sur Dist., IHSS 209)		62d	6/26/92	9/23/92	6/26/92	9/23/92																
246	Review Aerial Photos (IHSS 209)	1	10d	6/26/92	9/23/92	6/26/92	9/23/92																
247	STAGE 2 (Sur Dist., IHSS 209)		103d	9/24/92	2/24/93	9/24/92	2/24/93																
248	Visual Inspection (IHSS 209)	1,118	1d	9/24/92	9/24/92	9/24/92	9/24/92																
249	FIDLER Survey (IHSS 209)	248	18d	1/13/93	2/8/93	1/13/93	2/8/93																
250	FIDLER Survey Review (IHSS 209)	249	18d	1/29/93	2/24/93	1/29/93	2/24/93																
251	STAGE 3 (Sur Dist., IHSS 209)		110d	12/15/92	5/21/93	12/15/92	5/21/93																
252	Pond Sed Samp & SVI Samp (exempt)	27	110d	12/15/92	5/21/93	12/15/92	5/21/93																

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995			
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
253	Sur Soil Samples (IHSS 209)	250,118.98	4d	4/28/93	5/3/93	4/28/93	5/3/93																
254	Soil Borings (IHSS 209)	8,205FS + 1d	6d	4/27/93	5/4/93	4/27/93	5/4/93																
255	SAMPLE HANDLING & SHIPPING		Od	11/5/92	11/5/92	NA	NA																
256	Sample Handling & Shipping	d,173FF + 3d	Od	11/5/92	11/5/92	NA	NA																
257	AQUIFER TESTING		42d	7/20/93	9/16/93	7/20/93	NA																
258	Aquifer Testing	13,234,118	27d	7/20/93	8/25/93	7/20/93	NA																
259	Aquifer Testing Analyses	258	15d	8/26/93	9/16/93	NA	NA																
260	LOGGING		224d	11/11/92	10/1/93	11/11/92	NA																
261	Core Logging	212FF + 15d	Od	8/25/93	8/25/93	NA	NA																
262	Core Photography	261SS	200d	11/11/92	9/9/93	11/11/92	NA																
263	Computer Borehole Logs	261FF + 20d	Od	10/1/93	10/1/93	NA	NA																
264	Core Shelving	261SS	150d	11/11/92	9/7/93	11/11/92	NA																
265	FIELD EQUIPMENT		Od	7/26/93	7/26/93	NA	NA																
266	Field Equipment	1,182FF-5d	Od	7/26/93	7/26/93	NA	NA																
267	TASK 4 - SAMP ANALYSES and VALID (Exempt)		356d	10/7/92	3/13/94	10/7/92	NA																
268	SAMPLE ANALYSES - UNVALIDATED		295d	10/7/92	12/10/93	10/7/92	NA																
269	Landfill (IHSS 115)		289d	10/7/92	12/2/93	10/7/92	NA																
270	Stage 3 (IHSS 115)		250d	11/11/92	11/9/93	11/11/92	NA																
271	Rad. Sur Soil Landfill	153	90d	7/5/93	11/9/93	7/5/93	NA																
272	Sur Soil Landfill	153	45ed	7/5/93	8/19/93	7/5/93	NA																
273	Rad. Sur Soil Dist. (IHSS 115)	154	90d	2/3/93	6/10/93	2/3/93	NA																
274	Sur Soil Dist. (IHSS 115)	154	45ed	2/3/93	3/20/93	2/3/93	NA																
275	Rad. Soil Borings (soil gas, IHSS 115)	156	90d	5/20/93	9/27/93	5/20/93	NA																
276	Soil Borings (soil gas, IHSS 115)	156	45ed	5/20/93	7/4/93	5/20/93	NA																
277	Rad. Borings (charac., IHSS 115)	160	90d	12/30/92	5/7/93	12/30/92	NA																
278	Soil Borings (charac., IHSS 115)	160	45ed	12/30/92	2/13/93	12/30/92	NA																
279	Rad. Sed Samp (IHSS 115)	161	90d	11/11/92	3/24/93	11/11/92	NA																
280	Sed Samp (IHSS 115)	161	45ed	11/11/92	12/26/92	11/11/92	NA																
281	Rad. SW Samp (IHSS 115)	162	90d	11/11/92	3/24/93	11/11/92	NA																

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995				
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
282	SW Samp (IHSS 115)	162	45ed	11/11/92	12/26/92	11/11/92	NA																	
283	Grain Size Analysis (IHSS 115)	153,154	30ed	3/29/93	4/28/93	3/29/93	NA																	
284	Stage 4 (IHSS 115)		115d	6/18/93	12/2/93	6/18/93	NA																	
285	Rad. Wellpoints (IHSS 115)	167	90d	6/18/93	10/26/93	6/18/93	NA																	
286	Wellpoints (IHSS 115)	167	45ed	6/18/93	8/2/93	6/18/93	NA																	
287	Rad. Borings (IHSS 115)	170	90d	6/23/93	10/29/93	6/23/93	NA																	
288	Borings (IHSS 115)	170	45ed	6/23/93	8/7/93	6/23/93	NA																	
289	Rad. GW (1st Qtr., IHSS 115)	172	90d	7/1/93	11/8/93	7/1/93	NA																	
290	GW (1st Qtr., IHSS 115)	172	45ed	7/1/93	8/15/93	7/1/93	NA																	
291	Rad. GW (2nd Qtr., IHSS 115)	173	90d	7/26/93	12/2/93	NA	NA																	
292	GW (2nd Qtr., IHSS 115)	173	45ed	7/26/93	9/9/93	NA	NA																	
293	Stage 5 (IHSS 115)		92d	10/7/92	2/22/93	10/7/92	2/22/93																	
294	Rad. Sewer (IHSS 115)	181	92d	10/7/92	2/22/93	10/7/92	2/22/93																	
295	Sewer (IHSS 115)	181	#####	10/7/92	2/22/93	10/7/92	2/22/93																	
296	Ash Pits (IHSS 133)		157d	4/28/93	12/10/93	4/28/93	NA																	
297	Stage 3 (IHSS 133)		156d	4/28/93	12/9/93	4/28/93	NA																	
298	Rad. Surf. Soil (IHSS 133)	203	90d	6/28/93	11/3/93	6/28/93	NA																	
299	Surf. Soil (IHSS 133)	203	45ed	6/28/93	8/12/93	6/28/93	NA																	
300	Grain Size Analysis (IHSS 133)	203	30ed	6/28/93	7/28/93	6/28/93	NA																	
301	Rad. Boring (IHSS 133)	205	90d	4/28/93	9/2/93	4/28/93	NA																	
302	Boring (IHSS 133)	205	45ed	4/28/93	6/12/93	4/28/93	NA																	
303	Rad Soil Boring GW (IHSS 133)	205	90d	4/28/93	9/2/93	4/28/93	NA																	
304	Soil Boring GW (IHSS 133)	205	45d	4/28/93	6/30/93	4/28/93	NA																	
305	Rad. Boring (Mag. Anomaly W. of	209	90d	8/2/93	12/9/93	8/2/93	NA																	
306	Boring (Mag. Anomaly W. of IHS	209	45ed	8/2/93	9/16/93	8/2/93	NA																	
307	Stage 4 (IHSS 133)		140d	5/21/93	12/10/93	5/21/93	NA																	
308	Rad. Boring (IHSS 133)	211	90d	5/21/93	9/28/93	5/21/93	NA																	
309	Boring (IHSS 133)	211	45ed	5/21/93	7/5/93	5/21/93	NA																	
210	Rad. GW (1st Qtr., IHSS 133)	214	90d	7/1/93	11/8/93	7/1/93	NA																	

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995				
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
311	GW (1st Qtr., IHSS 133)	214	45ed	7/1/93	8/15/93	7/1/93	NA																	
312	Rad. GW (2nd Qtr., IHSS 133)	215	90d	8/3/93	12/10/93	NA	NA																	
313	GW (2nd Qtr., IHSS 133)	215	45d	8/3/93	10/5/93	NA	NA																	
314	C - Ponds (IHSS 142)		204d	11/10/92	9/1/93	11/10/92	NA																	
315	Stage 3 (IHSS 142)		90d	11/11/92	3/24/93	11/11/92	NA																	
316	Rad. Pond SW (IHSS 142)	228	90d	11/11/92	3/24/93	11/11/92	NA																	
317	Pond SW (IHSS 142)	228	45ed	11/11/92	12/26/92	11/11/92	NA																	
318	Rad. Pond Sed (IHSS 142)	229	90d	11/11/92	3/24/93	11/11/92	NA																	
319	Pond Sed (IHSS 142)	229	45ed	11/11/92	12/26/92	11/11/92	NA																	
320	Rad. Creek Sed (IHSS 142)	230	90d	11/11/92	3/24/93	11/11/92	NA																	
321	Creek Sed (IHSS 142)	230	45ed	11/11/92	12/26/92	11/11/92	NA																	
322	Stage 4 (IHSS 142)		204d	11/10/92	9/1/93	11/10/92	NA																	
323	Rad. Borings (IHSS 142)	233	90d	11/19/92	4/1/93	11/19/92	NA																	
324	Borings (IHSS 142)	233	45ed	11/10/92	12/25/92	11/10/92	NA																	
325	Rad. GW (1st Qtr., IHSS 142)	235	90d	11/23/92	4/5/93	11/23/92	NA																	
326	GW (1st Qtr., IHSS 142)	235	45ed	11/23/92	1/7/93	11/23/92	NA																	
327	Rad. GW (2nd Qtr., IHSS 142)	236	90d	2/16/93	6/22/93	2/16/93	NA																	
328	GW (2nd Qtr., IHSS 142)	236	45d	2/16/93	4/19/93	2/16/93	NA																	
329	Rad. GW (1st Qtr., 51193, IHSS	239	90d	1/26/93	6/2/93	1/26/93	NA																	
330	GW (1st Qtr., 51193, IHSS 142)	239	45d	1/26/93	3/30/93	1/26/93	NA																	
331	Rad. GW (2nd Qtr., 51193, IHSS	240	90d	4/27/93	9/1/93	4/27/93	NA																	
332	GW (2nd Qtr., 51193, IHSS 142)	240	45d	4/27/93	6/29/93	4/27/93	NA																	
333	Surface Dist. (IHSS 209)		104d	5/4/93	9/29/93	5/4/93	NA																	
334	Stage 3 (IHSS 209)		104d	5/4/93	9/29/93	5/4/93	NA																	
335	Rad. Pond SW (IHSS 209)	252	90d	5/24/93	9/29/93	5/24/93	NA																	
336	Pond SW (IHSS 209)	252	45ed	5/24/93	7/8/93	5/24/93	NA																	
337	Rad. Pond Sed (IHSS 209)	252	90d	5/24/93	9/29/93	5/24/93	NA																	
338	Pond Sed (IHSS 209)	252	45ed	5/24/93	7/8/93	5/24/93	NA																	
339	Rad. Sur Soil (IHSS 209)	253	90d	5/5/93	9/10/93	5/5/93	NA																	

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Enclosure 3: OU5 Woman Creek Detailed Project Schedule

Enclosure 3: OUS Woman Clerk										1992				1993				1994				1995			
WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
340	Sur Soil (IHSS 209)	253	45ed	5/5/93	6/19/93	5/5/93	NA																		
341	Rad. Soil Boring (IHSS 209)	254	90d	5/6/93	9/13/93	5/6/93	NA																		
342	Soil Boring (IHSS 209)	254	45ed	5/6/93	6/20/93	5/6/93	NA																		
343	Grain Size (IHSS 209)	253	30ed	5/4/93	6/3/93	5/4/93	NA																		
344	SAMPLE ANALYSES - VALIDATION		302d	12/28/92	3/13/94	NA	NA																		
345	Landfill (IHSS 115)		295d	12/28/92	3/3/94	NA	NA																		
346	Stage 3 (IHSS 115)		279d	12/28/92	2/8/94	NA	NA																		
347	Rad. Sur Soil Landfill (validated)	271	90ed	11/10/93	2/8/94	NA	NA																		
348	Sur Soil Landfill (validated)	272	45ed	8/19/93	10/3/93	NA	NA																		
349	Rad. Sur Soil Dist. (validated) (IH	273	90ed	6/11/93	9/9/93	NA	NA																		
350	Sur Soil Dist. (validated) (IHSS 11	274	45ed	3/22/93	5/6/93	NA	NA																		
351	Rad. Soil Core/Borings (validated)	275	90ed	9/28/93	12/27/93	NA	NA																		
352	Soil Core/Borings (validated) (soil	276	45ed	7/5/93	8/19/93	NA	NA																		
353	Rad. Borings (validated) (IHSS 11	277	90ed	5/10/93	8/8/93	NA	NA																		
354	Soil Borings (validated) (IHSS 115	278	45ed	2/16/93	4/2/93	NA	NA																		
355	Rad. Sed Samp (validated) (IHSS	279	90ed	3/25/93	6/23/93	NA	NA																		
356	Sed Samp (validated) (IHSS 115)	280	45ed	12/28/92	2/11/93	NA	NA																		
357	Rad. SW Samp (validated) (IHSS	281	90ed	3/25/93	6/23/93	NA	NA																		
358	SW Samp (validated) (IHSS 115)	282	45ed	12/28/92	2/11/93	NA	NA																		
359	Stage 4 (IHSS 115)		145d	8/2/93	3/3/94	NA	NA																		
360	Rad. BAT (validated) (IHSS 115)	285	90ed	10/27/93	1/25/94	NA	NA																		
361	BAT (validated) (IHSS 115)	286	45ed	8/2/93	9/16/93	NA	NA																		
362	Rad. Borings (validated) (IHSS 11	287	90ed	11/1/93	1/30/94	NA	NA																		
363	Borings (validated) (IHSS 115)	288	45ed	8/9/93	9/23/93	NA	NA																		
364	Rad. GW (1st Qtr., validated) (IH	289	90ed	11/9/93	2/7/94	NA	NA																		
365	GW (1st Qtr., validated) (IHSS 11	290	45ed	8/16/93	9/30/93	NA	NA																		
366	Rad. GW (2nd Qtr., validated) (IH	291	90ed	12/3/93	3/3/94	NA	NA																		
367	GW (2nd Qtr., validated) (IHSS 1	292	45ed	9/9/93	10/24/93	NA	NA																		
368	Stage 5 (IHSS 115)		64d	2/23/93	5/24/93	NA	NA																		

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995					
								Q2	Q3	Q4		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
369	Rad. Sewer (validated) (IHSS 115	294	90ed	2/23/93	5/24/93	NA	NA																		
370	Sewer (validated) (IHSS 115)	295	45ed	2/23/93	4/9/93	NA	NA																		
371	Ash Pits (IHSS 133)		186d	6/14/93	3/13/94	NA	NA																		
372	Stage 3 (IHSS 133)		184d	6/14/93	3/10/94	NA	NA																		
373	Rad. Surf. Soil (validated) (IHSS 1	298	90ed	11/4/93	2/2/94	NA	NA																		
374	Surf. Soil (validated) (IHSS 133)	299	45ed	8/12/93	9/26/93	NA	NA																		
375	Rad. Boring (validated) (IHSS 133	301	90ed	9/3/93	12/2/93	NA	NA																		
376	Boring (validated) (IHSS 133)	302	45ed	6/14/93	7/29/93	NA	NA																		
377	Rad Soil Boring GW (IHSS 133)	303	90d	9/3/93	1/14/94	NA	NA																		
378	Soil Boring GW (IHSS 133)	304	45d	7/1/93	9/2/93	NA	NA																		
379	Rad. Boring (validated)(Mag. Ano	305	90ed	12/10/93	3/10/94	NA	NA																		
380	Boring (validated)(Mag. Anomaly	306	45ed	9/16/93	10/31/93	NA	NA																		
381	Stage 4 (IHSS 133)		172d	7/5/93	3/13/94	NA	NA																		
382	Rad. Boring (validated) (IHSS 133	308	90ed	9/29/93	12/28/93	NA	NA																		
383	Boring (validated) (IHSS 133)	309	45ed	7/5/93	8/19/93	NA	NA																		
384	Rad. GW (1st Qtr., validated) (IH	310	90ed	11/9/93	2/7/94	NA	NA																		
385	GW (1st Qtr., validated) (IHSS 13	311	45ed	8/16/93	9/30/93	NA	NA																		
386	Rad. GW (2nd Qtr., validated) (IH	312	90ed	12/13/93	3/13/94	NA	NA																		
387	GW (2nd Qtr., validated) (IHSS 1	313	45ed	10/6/93	1/20/93	NA	NA																		
388	C - Ponds (IHSS 142)		233d	12/28/92	12/1/93	NA	NA																		
389	Stage 3 (IHSS 142)		123d	12/28/92	6/23/93	NA	NA																		
390	Rad. Pond SW (validated) (IHSS 1	316	90ed	3/25/93	6/23/93	NA	NA																		
391	Pond SW (validated) (IHSS 142)	317	45ed	12/28/92	2/11/93	NA	NA																		
392	Rad. Pond Sed (validated) (IHSS	318	90ed	3/25/93	6/23/93	NA	NA																		
393	Pond Sed (validated) (IHSS 142)	319	45ed	12/28/92	2/11/93	NA	NA																		
394	Rad. Creek Sed (validated) (IHSS	320	90ed	3/25/93	6/23/93	NA	NA																		
395	Creek Sed (validated) (IHSS 142)	321	45ed	12/28/92	2/11/93	NA	NA																		
396	Stage 4 (IHSS 142)		233d	12/28/92	12/1/93	NA	NA																		
397	Rad. Borings (validated) (IHSS 14	323	90ed	4/2/93	7/1/93	NA	NA																		

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995			
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
398	Borings (validated) (IHSS 142)	324	45ed	12/28/92	2/11/93	NA	NA																
399	Rad. GW (1st Qtr., validated) (IH	325	90ed	4/6/93	7/5/93	NA	NA																
400	GW (1st Qtr., validated) (IHSS 14	326	45ed	1/7/93	2/21/93	NA	NA																
401	Rad. GW (2nd Qtr., validated) (IH	327	90ed	6/23/93	9/21/93	NA	NA																
402	GW (2nd Qtr., validated) (IHSS 1	328	45ed	4/20/93	6/4/93	NA	NA																
403	Rad. GW (1st Qtr., validated) (5	329	90ed	6/3/93	9/1/93	NA	NA																
404	GW (1st Qtr., validated) (51193,	330	45ed	3/31/93	5/15/93	NA	NA																
405	Rad. GW (2nd Qtr., validated) (51	331	90ed	9/2/93	12/1/93	NA	NA																
406	GW (2nd Qtr., validated) (51193,	332	45ed	6/30/93	8/14/93	NA	NA																
407	Surface Dist. (IHSS 209)		131d	6/21/93	12/29/93	NA	NA																
408	Stage 3 (IHSS 209)		131d	6/21/93	12/29/93	NA	NA																
409	Rad. Pond SW (validated) (IHSS 2	335	90ed	9/30/93	12/29/93	NA	NA																
410	Pond SW (validated) (IHSS 209)	336	45ed	7/8/93	8/22/93	NA	NA																
411	Rad. Pond Sed (validated) (IHSS	337	90ed	9/30/93	12/29/93	NA	NA																
412	Pond Sed (validated) (IHSS 209)	338	45ed	7/8/93	8/22/93	NA	NA																
413	Rad. Sur Soil (validated) (IHSS 2	339	90ed	9/13/93	12/12/93	NA	NA																
414	Sur Soil (validated) (IHSS 209)	340	45ed	6/21/93	8/5/93	NA	NA																
415	Rad. Soil Boring (validated) (IHS	341	90ed	9/14/93	12/13/93	NA	NA																
416	Soil Boring (validated) (IHSS 209)	342	45ed	6/21/93	8/5/93	NA	NA																
417	TASK 5 - DATA EVALUATION		491d	7/15/92	6/28/94	7/15/92	NA																
418	Geology		307d	7/15/92	10/1/93	7/15/92	NA																
419	Historical OU Wide	1FS + 40d	307d	7/15/92	10/1/93	7/15/92	NA																
420	Landfill (IHSS 115)	+ 30d, 103FF	20d	3/19/93	8/30/93	3/19/93	NA																
421	Ash Pits (IHSS 133)	+ 30d, 103FF	20d	4/1/93	8/30/93	4/1/93	NA																
422	Surface Disturbances (IHSS 209)	Od, 98, 103FF	30d	6/17/93	8/30/93	6/17/93	NA																
423	Ponds C-1 & C-2 (IHSS 142)	d, 242, 103FF	20d	3/1/93	8/30/93	3/1/93	NA																
424	Hydrogeology	234	238d	12/1/92	11/9/93	12/1/92	NA																
425	Historical OU Wide	1FS + 50d	20d	12/1/92	12/29/92	12/1/92	NA																
426	Landfill (IHSS 115)	, 171FS + 30d	30d	8/10/93	9/21/93	8/10/93	NA																

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

Enclosure 3: 005 Woman Creek										1992				1993				1994				1995			
WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	02	03	04	01	02	03	04	01	02	03	04	01	02	03	04			
427	Ash Pits (IHSS 133)	213FS + 30d	30d	8/10/93	9/21/93	8/10/93	NA																		
428	Surface Disturbances (IHSS 209)	254FS + 30d	101d	6/17/93	11/9/93	6/17/93	NA																		
429	Ponds C-1 & C-2 (IHSS 142)	242FS + 30d	20d	2/1/93	4/6/93	2/1/93	NA																		
430	Numerical GW Modeling		325d	2/1/93	5/16/94	2/1/93	NA																		
431	Flow Model		232d	2/1/93	1/3/94	2/1/93	NA																		
432	Field Independent Activities		170d	2/1/93	9/30/93	2/1/93	NA																		
433	Recharge		170d	2/1/93	9/30/93	2/1/93	NA																		
434	Grid	433	146d	3/8/93	9/30/93	3/8/93	NA																		
435	Preliminary Setup		30d	10/1/93	11/12/93	NA	NA																		
436	Boundaries	434, 503	3d	10/1/93	10/5/93	NA	NA																		
437	Zone Ks	436	5d	10/6/93	10/13/93	NA	NA																		
438	Layer Elevations	437	6d	10/14/93	10/21/93	NA	NA																		
439	Stream/Pond Params	438	8d	10/22/93	11/2/93	NA	NA																		
440	Spring/Drain Params	439	8d	11/3/93	11/12/93	NA	NA																		
441	Preliminary Calibration		32d	11/15/93	1/3/94	NA	NA																		
442	Establish Targets	440	8d	11/15/93	11/24/93	NA	NA																		
443	Calibration Runs	442	24d	11/29/93	1/3/94	NA	NA																		
444	Update Params (Field Data)	424, 418	3d	11/10/93	11/12/93	NA	NA																		
445	Final Calibration		10d	11/15/93	11/30/93	NA	NA																		
446	Update Targets	444	4d	11/15/93	11/18/93	NA	NA																		
447	Calibration Runs	446	6d	11/19/93	11/30/93	NA	NA																		
448	Particle Tracking	447	6d	12/1/93	12/8/93	NA	NA																		
449	Solute Transport		118d	11/15/93	5/5/94	NA	NA																		
450	Telescope Flow Models	447	15d	12/1/93	12/21/93	NA	NA																		
451	Source Loading	444	16d	11/15/93	12/8/93	NA	NA																		
452	Estimate Kds	444, 493	5d	3/18/94	3/24/94	NA	NA																		
453	Est. Target Conc	452	1d	3/25/94	3/25/94	NA	NA																		
454	Model Adjustment	450, 453	14d	3/28/94	4/14/94	NA	NA																		
455	1-D Modeling	454	15d	4/15/94	5/5/94	NA	NA																		

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995			
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
456	Uncertainty Analysis	454	22d	4/15/94	5/16/94	NA	NA																
457	Hydrology	252	0d	1/27/93	5/21/93	1/27/93	5/21/93																
458	Numerical SW Modeling		355d	2/1/93	6/28/94	2/1/93	NA																
459	TSS Data Development		35d	2/1/93	3/22/93	2/1/93	NA																
460	Boundary Conditions	503	50d	7/7/93	9/15/93	7/7/93	NA																
461	Calibrate/verify	0,493FS-30d	60d	8/9/93	4/25/94	8/9/93	NA																
462	Uncertainty	461	25d	4/26/94	5/31/94	NA	NA																
463	Draft Report	462	20d	6/1/94	6/28/94	NA	NA																
464	Source Characterization	295	238d	2/1/93	1/11/94	2/1/93	NA																
465	Historical OU Wide	,103FF + 60d	20d	2/1/93	11/24/93	2/1/93	NA																
466	Landfill (IHSS 115)	269	20d	12/3/93	1/3/94	NA	NA																
467	Ash Pits (IHSS 133)	296	20d	12/13/93	1/11/94	NA	NA																
468	Surface Disturbances (IHSS 209)	333	20d	9/30/93	10/28/93	NA	NA																
469	Ponds C-1 & C-2 (IHSS 142)	314	20d	9/2/93	9/30/93	NA	NA																
470	Nature & Extent	295	248d	2/1/93	1/26/94	2/1/93	NA																
471	Historical OU Wide	,103FF + 45d	20d	2/1/93	11/3/93	2/1/93	NA																
472	Landfill (IHSS 115)	269FS + 10d	20d	12/17/93	1/18/94	NA	NA																
473	Ash Pits (IHSS 133)	296FS + 10d	20d	12/28/93	1/26/94	NA	NA																
474	Surface Disturbances (IHSS 209)	333FS + 10d	20d	10/15/93	11/11/93	NA	NA																
475	Ponds C-1 & C-2 (IHSS 142)	314FS + 10d	20d	9/17/93	10/15/93	NA	NA																
476	Air Quality Data Review	1	124d	4/20/93	10/14/93	4/20/93	NA																
477	Met Data Review		19d	4/20/93	5/14/93	4/20/93	NA																
478	Site/Receptor Characteristics	477	5d	5/17/93	5/21/93	NA	NA																
479	Source Data Review	333	10d	9/30/93	10/14/93	NA	NA																
480	Model Selection	504	10d	8/5/93	8/18/93	NA	NA																
481	Air Dispersion Modeling		290d	4/15/93	6/9/94	4/15/93	NA																
482	Source, Site, Receptor Data	493	10d	4/15/93	3/23/94	4/15/93	NA																
483	Model Runs	482	15d	3/24/94	4/13/94	NA	NA																
484	Comparison w/Actual Data	483	10d	4/14/94	4/27/94	NA	NA																

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Enclosure 3: OU5 Woman Creek Detailed Project Schedule

Enclosure 3: OUS Woman Creek Detailed										1992				1993				1994				1995			
WBS	ACTIVITY	PRED	DAYS	S START	S FINSH	A START	A FINSH	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
485	Back-Calc Model Runs	484	15d	4/28/94	5/18/94	NA	NA																		
486	Report	485	15d	5/19/94	6/9/94	NA	NA																		
487	TASK 6 - BASELINE RISK ASSESSMENT		445d	2/1/93	11/4/94	2/1/93	NA																		
488	Contaminant Identification		19d	1/5/94	2/1/94	NA	NA																		
489	Contaminant Identification Data Manageme	268FS + 15d	5d	1/5/94	1/11/94	NA	NA																		
490	Contaminant Identification Data Evaluation	489	14d	1/12/94	2/1/94	NA	NA																		
491	Technical Memo 11 -COCs		72d	2/2/94	5/13/94	NA	NA																		
492	Draft TM11 COC	490	21d	2/2/94	3/3/94	NA	NA																		
493	Draft Comments TM11 COC EG&G	492	10d	3/4/94	3/17/94	NA	NA																		
494	Draft Final TM11 COC	493	10d	3/18/94	3/31/94	NA	NA																		
495	Draft Final Comments TM11 COC CDH/EP	494	21d	4/1/94	4/29/94	NA	NA																		
496	Final TM11 COC	495	10d	5/2/94	5/13/94	NA	NA																		
497	Exposure Assessment		101d	4/4/94	8/24/94	NA	NA																		
498	Model Oversight	430FF, 458FF	61d	4/4/94	6/28/94	NA	NA																		
499	Exposure Assessment	498	40d	6/29/94	8/24/94	NA	NA																		
500	Technical Memo 12- Exposure Scenarios		140d	2/1/93	8/18/93	2/1/93	NA																		
501	Draft TM12 to EG&G/DOE		80d	2/1/93	5/24/93	2/1/93	5/24/93																		
502	Draft Comments TM12 Expo	501	25d	5/26/93	6/30/93	5/26/93	6/30/93																		
503	Draft Final TM12 to EPA/CDH Expo	502	3d	7/1/93	7/6/93	7/1/93	7/6/93																		
504	Draft Final Comments TM12 Expo	503	21d	7/7/93	8/4/93	7/7/93	NA																		
505	Final TM12 Expo	504	10d	8/5/93	8/18/93	NA	NA																		
506	Technical Memo 13 - Models		81d	7/1/93	10/26/93	7/1/93	NA																		
507	Draft TM13 to EG&G/DOE Models	502	25d	7/1/93	8/5/93	7/1/93	8/5/93																		
508	Draft Comments TM13 Models	507	15d	8/6/93	8/26/93	8/6/93	NA																		
509	Draft Final TM13 to EPA/CDH Models	508	10d	8/27/93	9/10/93	NA	NA																		
510	Draft Final Comments TM13 Models	509	21d	9/13/93	10/12/93	NA	NA																		
511	Final TM13 Models	510	10d	10/13/93	10/26/93	NA	NA																		
512	Toxicity Assessment		40d	3/18/94	5/12/94	NA	NA																		
513	Toxicity Assessment	493	30d	3/18/94	4/28/94	NA	NA																		

Enclosure 3: OU5 Woman Creek Detailed Project Schedule

WRS	ACTIVITY	PRED	DAYS	S START	S FINSH	A START	A FINSH	1992				1993				1994				1995			
								Q2	Q3	Q4		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
514	Develop Toxicity Constraints	513	10d	4/29/94	5/12/94	NA	NA																
515	Technical Memo 14 - Toxicity Assmt.		72d	3/4/94	6/14/94	NA	NA																
516	Draft TM14 Tox	492	21d	3/4/94	4/1/94	NA	NA																
517	Draft Comments TM14 Tox	516	10d	4/4/94	4/15/94	NA	NA																
518	Draft Final TM14 Tox	517	10d	4/18/94	4/29/94	NA	NA																
519	Draft Final Comments TM14 Tox	518	21d	5/2/94	5/31/94	NA	NA																
520	Final TM14 Tox	519	10d	6/1/94	6/14/94	NA	NA																
521	Risk Characterization		15d	6/10/94	6/30/94	NA	NA																
522	Risk & HI Calculation	493,481	10d	6/10/94	6/23/94	NA	NA																
523	Radiation Dose Calculation	522	5d	6/24/94	6/30/94	NA	NA																
524	Report Preparation		50d	8/25/94	11/4/94	NA	NA																
525	Draft	97,521,512	10d	8/25/94	9/8/94	NA	NA																
526	Draft Comments	525	10d	9/9/94	9/22/94	NA	NA																
527	Draft Final	526	10d	9/23/94	10/6/94	NA	NA																
528	Draft Final Comments	527	10d	10/7/94	10/21/94	NA	NA																
529	Final	528	10d	10/24/94	11/4/94	NA	NA																
530	Meetings	01SS,526FF	200d	2/1/93	9/22/94	2/1/93	NA																
531	TASK 7 - DEVEL & SCREEN ALTERNATIVES		538d	9/15/92	11/4/94	9/15/92	NA																
532	Devil Alts		520d	9/15/92	11/4/94	9/15/92	NA																
533	TASK 8 - TREATABILITY STUDIES (Exempt)	1	Od	6/26/92	6/26/92	6/26/92	6/26/92																
534	TASK 9 - RFI/RI REPORT		337d	1/27/94	5/30/95	NA	NA																
535	DRAFT		227d	1/27/94	12/20/94	NA	NA																
536	Interim Draft I	470	30d	1/27/94	3/10/94	NA	NA																
537	Interim Draft I Comments EG&G/DOE	536	15d	3/11/94	3/31/94	NA	NA																
538	Interim Draft II	487	20d	11/7/94	12/6/94	NA	NA																
539	Interim Draft II Comments EG&G/DOE	538	10d	12/7/94	12/20/94	NA	NA																
540	Draft (IAG Milestone 11/30/93)	539	Od	12/20/94	12/20/94	NA	NA																
541	FINAL		60d	3/7/95	5/30/95	NA	NA																
542	Draft Final I	540FS + 50d	20d	3/7/95	4/3/95	NA	NA																

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Enclosure 3: OUS Woman Creek Detailed Project Schedule

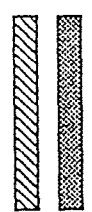
WBS	ACTIVITY	PRED	DAYS	S STRT	S FNSH	A STRT	A FNSH	1992				1993				1994				1995			
								Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
543	Draft Final I Comments EG&G/DOE	542	15d	4/4/95	4/24/95	NA	NA																
544	Draft Final II	543	15d	4/25/95	5/15/95	NA	NA																
545	Draft Final II Comments EG&G/DOE	544	10d	5/16/95	5/30/95	NA	NA																
546	Final (5/2/94 Milestone to Agencies)	545	0d	5/30/95	5/30/95	NA	NA																

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Enclosure 3: OU5 Woman Creek Detailed Project Schedule

Project: OU5 RFI/RI
Date: 9/22/93

Critical
Noncritical



Progress
Milestone



Summary
Rolled Up



ENCLOSURE 4

1. Time required for the Procurement Cycle.

The IAG and the Work Plan did not allow adequate time for the procurement of a subcontract following approval of the Work Plan. This is based on language within the IAG Scope of Work and IAG Schedule assumptions dated August 14, 1990 which assumed all procurement work would be done in parallel with regulatory approval of the documents. The IAG OU5 milestone schedule allowed 21 work days from the date the Final RFI/RI Work Plan was submitted (IAG deliverable date August 30, 1991) for implementation of field investigations. The Federal Acquisition Regulations (FAR) and DOE Acquisition Regulations (DEAR) require a definition of scope prior to contract award. The DOE position is that complete parallel scheduling for procurement is unrealistic and cannot be achieved under any circumstances.

The procurement cycle would include writing the Statement of Work (SOW), submitting the request for proposal to the bidder, preparation of a proposal by the bidder, technical and cost evaluation of the subcontractor's proposal, contract negotiations and award of the contract. This process began on April 1, 1992 and a contract was issued to the subcontractor on June 26, 1993. The procurement cycle for this contract took 64 work days. Please note that the average procurement cycle for a Basic Ordering Agreement (BOA) contract of this size (greater than \$1,000,000) was 77 days (Acquisition Summary for Subcontracted Environmental Services, September 17, 1992).

2. Delays caused by additional work scope over that specified in Table 5 of the IAG.

There are two groupings of activities that added to the scope of work over and above that specified in the IAG. They are the generation and approval cycle of Technical Memorandums 1 through 7, 9 and 10, and implementation of work not required in the IAG (e.g. geophysical surveys).

A. Generation and approval cycle of Field Sampling Plan (FSP) Technical Memorandums (TMs)

The OU5 Work Plan utilized the "Observational Approach" which involves continuous reassessment of the site conditions as data are obtained. The Field Sampling Plan (FSP) incorporated the extensive use of Technical Memorandums (TM) to guide the work performed in the Field. The FSP was a phased approach to investigation with subsequent activities based on the results of completed or in progress activities. Most

activities required a TM be generated prior to their implementation. Delays have only been requested for four of the nine TMs.

The life cycle for the nine FSP TMs from generation to acceptance by the regulatory agencies on OU5 follows:

ACTIVITY	DURATION (WORK DAYS)		
	MIN	MAX	AVE
• Generate Draft TM, concurrent DOE/EG&G Peer review, deliver to EPA/CDH	19	61	35
• EPA/CDH Review Time for Draft TM	15	55	27
• Respond to EPA/CDH comments and deliver Final TM to EPA/CDH	9	14	11
• EPA/CDH Review Time for Final Approval	5	21	12
Totals	48	151	85

A total of nine TMs were generated, 1 through 7 and 9 and 10. Four of the TM's were/are on the critical path, including:

- TM2, Surface Geophysical Surveys. This TM planned the magnetic and EM surveys conducted at IHSS 133.1 through 133.6 and IHSS 115. Total life cycle, 74 work days. Actual delay = 15 work days.

- TM3, Surface Soil Sampling Plan - IHSS 115, Original Landfill. Total life cycle, 105 work days. Actual delay = 35 work days.

- TM5, Revised Soil Gas Sampling Plan -- Original Landfill. This TM designed the soil gas sampling plan at IHSS 115. Total life cycle, 82 work days. Actual delays = 20 work days.

- TM6, Cone Penetrometer Testing (CPT) and Groundwater Sampling Plan -- Original Landfill. This TM designed the CPT and wellpoint sampling plan at IHSS 115. Total life cycle, 73 work days. Actual delays = 20 work days.

The total critical path time for the generation and approval of the above TMs was 90 work days.

The remaining TM's (which were not on the critical path and did not create delays) are:

- TM1, Revised Network Design -- Field Sampling Plan. This TM

was generated to clarify the surface water and sediment sampling program for Woman Creek, the South Interceptor Ditch (SID) and C-1 and C-2 Ponds. Total life cycle: 75 work days.

- TM4, Surface Soil Sampling Plan - Ash Pits, Incinerator and Concrete Wash Pad - IHSS 133.1 through 133.6. Total life cycle: 71 work days.

- TM7, Soil Boring Sampling Plan -- Ash Pits 1-4, Incinerator and Concrete Wash Pad -- IHSS 133.1 through 133.6. Total life cycle: 111 work days.

- CANCELED TM8, This TM was to be Monitoring Well Installation Plan, Original Landfill, IHSS 115. The TM was not produced, but was replaced by two letters justifying the location of and number of wells to be installed. Total life cycle: N/A

- TM9, Monitoring Well Installation Plan, Ash Pits 1-4, Incinerator and Concrete Wash Pad -- IHSS 133.1 through 133.6. Total life cycle: 67 work days.

- TM10, Soil Sampling Plan -- Surface Disturbance Areas. Total life cycle: 52 work days.

B. Implementation of non-IAG specified work

The Final Work Plan incorporated additional tasks that were not listed in Table 5 of the IAG. The tasks and durations of these activities include:

- IHSS 115 - Original Landfill
- Aerial Photograph review, duration: 2 work days;
- Geophysical Surveys [magnetic and electromagnetic (EM)] on 25 foot grids, duration: 25 work days;
- Collect 67 random soil samples, duration: 20 work days;
- The soil gas sample spacing was reduced to 40 foot spacing at the downgradient perimeter of the old landfill, 50 foot spacing over suspected buried metallic material and 20 foot spacing over areas where VOC's were found. This added 212 soil gas sampling points. Field crews averaged 10 sites/day, duration: 20 work days; and,
- Cone Penetrometer Testing (CPT), one line of 22 sampling locations, duration: 15 work days.

- IHSS 133.1 - 133.6 - Ash Pits, Incinerator, and Concrete Wash Pad
- High Purity Germanium (HPGe) Survey, the IAG did call for a radiation survey using a G-M detector. A HPGe survey replaced the "G-M detector" survey, but a Field Instrument Detection Low Energy Radiation (FIDLER) survey was also conducted on a four foot grid over the "hot spots" identified by the HPGe survey.
- Geophysical Surveys (magnetic and EM) on 25 foot grids, duration: 26 work days; and,
- Surficial soil sampling, a total of 20 samples were collected, duration: 6 work days.
- IHSS 209, Surface Disturbance(s)
 - investigation of the surface disturbance west of IHSS 209 and the surface area south of IHSS 133 along with IHSS 209,
 - review aerial photographs, duration: 2 work days;
 - a FIDLER survey on 20 foot grid, duration: 5 work days;
 - collected 19 surface soil samples, duration: 6 work days;
 - collected surface water samples at pond like depressions in IHSS 209, duration: 1 work day; and
 - four boreholes were drilled, duration: 3 work days.

The work days associated with these activities include the actual time in the field as well as the time required for data reduction and preliminary interpretation.

Total delays involved in the implementation of the above work was 131 work days.

3. Lack of review time for Human Health Risk Assessment (HHRA) Technical Memorandums (TMs).

There is no scheduled review time for the HHRA TMs in the IAG schedule. The addition of 20 work days of review time for each of the four TMs to be produced as part of the HHRA will add a total of 80 days to the schedule.